



GOBIERNO DE PUERTO RICO
OFICINA DE LA SECRETARÍA DE LA GOBERNACIÓN

November 17, 2022

Hon. Jessica Rosenworcel
Chairwoman
Federal Communications Commission

Good morning, Chairwoman Rosenworcel, Commissioners and distinguished guests. My name is Enrique Völckers-Nin, Deputy Chief of Staff on Innovation, Information, Data and Technology of the Government of Puerto Rico, I am honored to be part of the panel on today's hearing.

I come before you to relate real life experiences we lived during the landfall of Hurricane Fiona on September 17th of the present year.

Ever since hurricane Maria back in September 2017, the Government of Puerto Rico has recognized that telecommunications is an essential service for citizens, in 2018 the Government of Puerto Rico enacted Public Law #5 for this matter, establishing that Telecommunications is an essential service to the public. Believe it or not, before hurricane Maria, only power and water were considered essential. Now a days Communications is included as one of our lifelines under our incident management system.

The Government of Puerto Rico has established a close working relationship with federal agencies and structures, such as FEMA, DHS/CISA, and the FCC. I'm confident that we have matured together, and with every incident, our relationship grows more robust, and the knowledge of Puerto Rico's peculiarities increases. Like every state or territory, the response and needs in a disaster are different. Our most significant handicap is a very outdated and fragile power system. So delicate, that as a precaution measure, the power plants are turned off to reduce the impact on them and the transmission lines during mayor atmospheric threats. Once the generation plants are turned off, some of them take days to bring them back to service, without considering or including the impact of the hurricane or event on them. I understand that no other jurisdiction intentionally provokes a total blackout as a precautionary measure.



GOBIERNO DE PUERTO RICO
OFICINA DE LA SECRETARÍA DE LA GOBERNACIÓN

Everyone in Puerto Rico, has learned to prepare to be without commercial power and water for days, weeks, and, based on the event's impact or location, even months.

Telecom carriers have made significant efforts and investments to remain operational without commercial power, installing generators and batteries in most cell sites, central offices, and other critical infrastructure sites. At the same time, all the logistics needed to keep these generators up and running are part of their emergency plans, which include fuel supplies, refueling schedules, maintenance, and repairs. In addition, past experiences have taught them the need for multiple fuel suppliers, as higher demand for fuel is required, since home and business owners maintain their generators operational, competing for fuel availability.

After Hurricane Fiona, we confronted fuel availability problems as distributors admitted that their diesel inventory was running low. For that reason, they opted to ration the amount provided. In many cases, trucks of 10,000 gallons of fuel were only being served 3,000 or 5,000 gallons. While working with this situation, we learned that the leading carriers have a daily demand of 75,000 gallons of fuel to maintain critical operations running.

In the following days after the impact of Hurricane Fiona, the demand for fuel went down as PREPA (Puerto Rico's Power Authority) and LUMA were able to restore power in most of the Island. We did learn that fuel inventory is an area that the Island needs to improve for future events, and I trust that actions will be taken to increase fuel inventory.

LUMA, the Public-Private Partnership contracted to run the public power utility's transmission and distribution system shared its Energy Emergency Response Plan (ERP) with the government and critical entities, that included critical infrastructure and facilities identified as Level 1 facilities which provide health and safety to the public and are tied to critical community lifelines. Still, as part of our response after Fiona, we recognize multiple matters to improve. Especially on sharing of information and recovery progress efforts. Multiple government entities are working with Luma on this matter, such as P3, the Energy Bureau, and the Office of the Governor, which I represent.



GOBIERNO DE PUERTO RICO
OFICINA DE LA SECRETARÍA DE LA GOBERNACIÓN

The Puerto Rico Information and Technology Service (PRITS), made efforts to connect LUMA's Outage Management System to provide feeders availability status to be used in our Emergency Management Assets System (PREMAS) to assess and react to the feeder's impact on critical infrastructure. This includes but not limited to cell towers, central offices, hospitals, medical facilities, Public Safety sites, water pumps, and others. Unfortunately, at the time of this event, we could not synchronize these data sets, and worked with our system without the proper data connection to the power grid systems.

The FCC DIRS was activated for FIONA, a reporting tool that we all agree is very handy for the recovery efforts, but at a local level, there was a level of unwillingness to share this type of information with the local Government, which we understand is a sensitive and confidential matter. Being former Chief Innovation and Information Officer of Puerto Rico and working directly with DHS/CISA on a local critical infrastructure mapping system, I know first hand the steps and process to take, in order to maintain this information at the high level confidentiality status it deserves. This information is essential to properly support the carriers themselves, as we recognize that by helping the carriers, we are helping our constituents and end-users. At a local level, the more shared information with the Government of Puerto Rico, the better we can assist in the recovery efforts. Ultimately, we all agree that what we pursue is to bring everything back to normal quicker and better. Without the needed information, it's difficult to plan ahead on fuel and emergency deployments during times of need.

The DIRS report demonstrated that carriers remained operational at an acceptable level. Reflecting how well prepared they are for the days after a disaster like Hurricane Fiona strikes. As days pass it becomes more challenging to maintain their operations, because of fuel availability.

Nevertheless we need to bring to the FCC's attention that we recognize that [from a percentage point of view], most of the cell sites are in the metropolitan area. During and after Fiona the affected regions were the south and the west part of the Island; so, from a percentage or weight perspective, the affected area was not clearly represented in a total percentage of coverage in the area. We need to dive into the locations in detail to see the specific affected area and correlate it with population density. As mentioned



GOBIERNO DE PUERTO RICO
OFICINA DE LA SECRETARÍA DE LA GOBERNACIÓN

before Puerto Rico counts with a high level technological Georeferenced tool that we are polishing with all the experiences of the past hurricanes and earthquakes, so that we have live data sets that represent the reality of our critical infrastructure and helps the Government, and Emergency and Rescue efforts make intelligent decisions based on data.

In retrospect, we can only say that the impact of hurricane Fiona in Puerto Rico on September 17 on the Telecommunication side is proof that significant improvements have been made since hurricane María in 2017. We are more than grateful of all the relief efforts made by the FCC and the enactment of the Uniendo Puerto Rico Fund so that we could recover from the disasters and bring more resiliency and connectivity to our constituents. Nevertheless, with the Bipartisan Infrastructure Bill it is imperative that we discuss ways to flexibilize the use of all Federal Funds to maximize the benefit for all of the 3.2 million American Citizens that live in Puerto Rico.

Last but not least, Governor Pedro Pierluisi and I would like to thank the FCC members who, during and after hurricane Fiona flew to Puerto Rico to assist in the recovery efforts: Chairwoman, Jessica Rosenworcel, Roberto Mussenden, Tim Perrier, Juan Silva, Justin Cain and Carmen Scurato.

We can say that the island has always counted on support from the FCC, so again we are most grateful, thank you.

Enrique A. Völckers-Nin

Deputy Chief of Staff on Innovation, Information, Data & Technology